

SECTION 8

8.29 SEWER CROSSING:

When, during the course of installation, the main or associated piping crosses over or under a sanitary or storm sewer constructed of either vitrified clay or concrete pipe, the sewer shall be replaced or protected as shown on the Plans and as described below or as otherwise directed by Denver Water.

When the sewer is 15 inches or less in diameter and crosses over the water main or associated piping, and protection is not otherwise shown on the Plans, where applicable, the sewer shall be replaced with poly-wrapped Special Class 50 ductile iron pipe manufactured in accordance with AWWA C151 or Type PSM SDR 35 PVC sewer pipe manufactured in accordance with ASTM D 3034. Re-connections to the existing sewer pipe shall be made with watertight, flexible couplings approved by Denver Water and the Authority having jurisdiction over the sewer being replaced. All drains that exist under the sewer shall be restored in a manner that will prevent any flow in the drain from entering the trench in which the water main or associated piping is installed.

If the sewer is greater than 15 inches in diameter, all necessary precautions shall be taken to protect the sewer during installation of the main or associated piping. All drains that exist under the sewer shall be restored in a manner that will prevent any flow in the drain from entering the trench in which the water main or associated piping is installed.

When the water main or associated piping crosses over the sewer with less than 2-foot clear distance between the pipes, the sewer shall be encased with a minimum of 6 inches of concrete from spring line to 6 inches above the top of the sewer. The encasement shall extend along the centerline of the sewer a minimum of one foot beyond the OD of the water main or associated piping at each end of the encasement.

In addition, when the water main or associated piping crosses under a sewer, the bedding material shall be replaced around the sewer to a point at least one foot above the top of the sewer pipe for sewers 15 inches in diameter and smaller and to at least springline for sewers larger than 15 inches in diameter, and thoroughly compacted and consolidated to support the sewer.

Sewers may not be cut without the express consent of the authority having jurisdiction over the sewer.

See Sheet 31 of the Standard Drawings for typical trench sections.